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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------|-------------|----------------------|---------------------|------------------|
| 10/726,934 | 12/02/2003 | Osamu Kobayashi | GENSP110 | 5344 |
| 22434 | 7590 | 08/05/2005 | EXAMINER | |
| BEYER WEAVER & THOMAS LLP | | | JUNG, MIN | |
| P.O. BOX 70250 | | | ART UNIT | |
| OAKLAND, CA 94612-0250 | | | PAPER NUMBER | |
| | | | 2663 | |

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/726,934 | Applicant(s) KOBAYASHI, OSAMU | |
| | Examiner Min Jung | Art Unit 2663 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: The Related Application data on pages 1 and 2 should be completed.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification at pages 14 and 15 fails to provide proper description for the enumeration method claimed. The specification describes the following: "It has been researched and understood that all the standard pixel/audio clock frequencies that exist today are a subset of the following master frequency: $23.76\text{GHz} = 2^{10} \times 3^3 \times 5^7 \times 11^1 \text{ Hz}$. This means that a pixel (or audio) clock rate can be expressed with four parameters, A, B, C, D as: Pixel clock rate = $2^A \times 3^B \times 5^C \times 11^D$. A=4 bits, B=2 bits, C=3 bits, and D=1 bit." From this description, it is not clear what is described here is a prior art description

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or a part of the present invention. So, is the research the current research, or is it what's been known in the past? If it is the current finding, is the result an empirical one? It seems that only the conclusion is disclosed without any elaboration on the research itself. Also unclear are the values of the superscripts; 10, 3, 7, and 1, which generalized expression are A, B, C, and D. If A is defined to have 4 bits, as it is in the specification, it can have values up to 15, not 10, in which case, the rate can be higher than 23.76 GHz. Another vague idea is the expression used for the Pixel clock rate – the symbol “*” is used between the terms 2^A and 3^B . Is it supposed to be something different from the algebraic expression “x”? The same symbol “*” is also used at the end of paragraph [0025] – “pixel clock rate is equal to the link rate * 22/51”. If this symbol is understood as “x”, this statement does not make sense, because with the condition given in the paragraph [0025], it should be that the pixel clock rate is equal to the link rate x 0.8.

In addition to all the questions raised above, all the claimed subject matter is described in less than one page (in two short paragraphs – [0024] and [0025]). The description is not enough nor accurate to provide a meaningful understanding for a person of ordinary skill in the art and therefore, fails to provide an enabling disclosure.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 5, it is not clear what exactly is meant by enumeration method and computer program product for enumerating. Does it mean 'determining', or is it implying 'determining a plurality of different pairs', or does it mean something else? It is also not clear what exactly is performed by "expressing" step. How are the pixel/audio clock rate and the link rate expressed? Based on what condition are the A, B, C, and D determined? How does the master frequency play a role in expressing the rates? The general idea of 'expressing ... rates....with parameters.....based upon a master frequency.....' is very vague and indefinite. Further, A, B, C, and D should be defined. In the 'regenerating' step, it is not clear if the term "clock" is equated with the term "clock rate".

In claims 2 and 6, the expression "*" is unclear in what is meant by it. Is it the same as "x" in the algebraic expression?

In claims 3 and 7, it is unclear what is meant by "A=4 bits, B=2 bits",etc.? Does it mean that the value A is expressed in 4 bits, meaning that it can have 16 different values?

In claims 4 and 8, it is not clear what exactly is the meaning of the parameters A', B', C', and D'. These also need to be defined.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Siemens et al. PG Pub, the Lin et al. Patent, the Page patent, and the Bodenschatz PG Pub., are cited for further references.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Min Jung whose telephone number is 571-272-3127.

The examiner can normally be reached on Monday, Thursday, Friday 7:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJ
July 27, 2005


Min Jung
Primary Examiner